

-13-

CLAIMS

1. A wheel assembly for a vehicle, the assembly comprising:-

a wheel rim adapted to support a tyre;

a first support plate mounted to said rim;

a second support plate adapted to be mounted to an axle;

first coupling means, connected between said first and second support plates, for transferring torque between said first and second support plates; and

second coupling means, connected between said first and second support plates, for transferring radial and axial forces from said first support plate to said second support plate;

wherein said first and second coupling means are incapable of transferring, from said first support plate to said second support plate, radial or axial forces, tending to remove the assembly from the axle, and exceeding respective predetermined levels.

2. An assembly according to claim 1, wherein said first coupling means comprises torque transfer means adapted to transfer torque from said second to said first support plate.

3. An assembly according to claim 2, wherein said torque transfer means includes at least one body member having first engaging means for enabling the or each said body member to slide in a first direction relative to said first support plate, and second engaging means for enabling the or each said body member to slide in a second direction, not parallel to said first direction, relative to said second support plate.

-14-

4. An assembly according to claim 2 or 3, wherein said torque transfer means includes at least one body member and a plurality of first linkages pivotably connected between at least one said body member and said first support plate, and a plurality of second linkages pivotably connected between at least one said body member and said second support plate.
5. An assembly according to any one of the preceding claims, wherein said second coupling means further includes at least one first coupling member connected between said first and second support plates and adapted to fracture as a result of application thereto of radial or axial forces exceeding said respective predetermined levels.
6. An assembly according to claim 5, wherein said first and/or second coupling means includes a plurality of second coupling members adapted to fracture as a result of fracture of at least one said first coupling member.
7. An assembly according to any one of the preceding claims, wherein said second support plate is adapted to be mounted to said axle via a gearbox.
8. An assembly according to any one of the preceding claims, wherein said second support plate defines a region of decreasing cross section in a direction transverse to said axle.
9. An assembly according to any one of the preceding claims, further comprising removable securing means for securing said assembly to the axle.
10. A wheel assembly for a vehicle, the assembly substantially as hereinbefore described with reference to Figures 2 to 6 of the accompanying drawings.

-15-

11. A vehicle comprising:

a chassis;

a cab for accommodating at least one occupant;

at least one wheel assembly according to any one of the preceding claims; and

a respective axle provided on the chassis for supporting the or each said wheel assembly.